

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

This response is submitted in response to the Final Office Action mailed October 20, 2004, to request reconsideration of the rejection of claims 26, 42-43 and 45-46 as set forth therein. In the event the Examiner determines that the foregoing amendments do not place the case in condition for allowance, it is respectfully requested that the above amendments be entered to place the claims in better form for consideration on appeal.

In the Final Office Action, the Examiner rejects claims 26, 42-43 and 45-46. Claim 26 is rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 5,852,485 to Shimada et al. (hereinafter "Shimada") in view of the newly cited reference of U.S. Patent No. 5,702,776 to Hayase et al. (hereinafter "Hayase"). Claims 42-43 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Shimada in view of Hayase, and further in view of U.S. Patent No. 6,023,317 to Xu et al. (hereinafter "Xu"). Claim 45 is rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Shimada in view of Hayase, and further in view of U.S. Patent No. 5,721,597 to Kakinuma et al. (hereinafter "Kakinuma"). Claim 46 is rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Shimada in view of Hayase, and further in view of U.S. Patent No. 6,181,402 to Shim et al. (hereinafter "Shim").

Specifically, the Examiner alleges that Shimada discloses all the elements of independent claim 26, but acknowledges that Shimada fails to teach a flat color filter and fails to teach forming an insulating layer between the pixel electrode and the common electrode. However, the Examiner alleges that the newly cited reference of Hayase teaches a color filter having a flat surface formed on a lower substrate. Further, the Examiner alleges that it would be obvious to one of ordinary skill in the art to form an interlayer between two electrodes for insulating the

electrodes. Therefore, the Examiner alleges that the combination of the two references renders the present invention as recited in independent claim 26 obvious.

In response, independent claim 26 has been amended to clarify its distinguishing features. Specifically, independent claim 26 has been amended to recite that the color filter is disposed between the first substrate and the liquid crystal layer, and that the protection layer is not a part of any of the plural thin film transistors.

Support for the amendment is found throughout the specification; specifically, in Figs. 2A – 2E, and on page 16, line 2 – page 17, line 14. Therefore, Applicant respectfully submits that no new matter has been added by way of the amendment to the claim. Further, claim 26 has been amended to simply clarify the present invention; therefore, no new issue is raised by the amendment to claim 26, and Applicant respectfully requests entry of the amendment.

In his rejection of independent claim 26, the Examiner alleges that “a protection layer (e.g., channel protection layer 25) is formed over the lower substrate” in Shimada. However, it is apparent that the channel protection layer 25 is a part of a TFT, from the description in Shimada in column 21, lines 50-65 (“At each crossing point of the source line 28' and the gate line 22, the TFT 230 serving as a switching element is formed so as to correspond to each picture element area. As shown in Fig. 12B, the TFT 230 includes the gate electrode 22', the gate insulation film 23, the semiconductor layer 24, *and a channel protection layer 25* formed in the center of the semiconductor layer 24, and contact layers 26a and 26b formed so as to cover both edges of the channel protection layer 25. The source line 28' and an underlying transparent conductive film 27a are connected to the contact layer 26a in an overlapped manner. This overlapping portion serves as a source electrode 28a. The drain electrode 28b and an underlying transparent film 27b are connected to the contact layer 26b in an overlapped manner.

An interlayer insulation film 29 is formed thereon so as to cover the TFT 230, the gate line 22 and the source line 28").

The channel protection layer 25 is completely different from the protection layer of the present invention. The channel protection layer of Shimada corresponds to the semiconductor film 105 in the specification of the present invention. In the present invention, the gate electrode 102, the source electrode 107, the drain electrode 106 and semiconductor film constitute a TFT. Therefore, Shimada fails to teach forming a protection layer that is not a part of any one of the plural thin film transistors.

Further, the Examiner alleges that Hayase discloses a color filter (10) having a flat surface formed on a lower substrate (111). However, the color filter (10) of Hayase is disposed between the liquid crystal 20 and the second transparent substrate 112 which is a transparent substrate at a front side. On the other hand, according to the present invention, the color filter 110 is disposed between the liquid crystal layer 140 and the first substrate 101, which is a substrate at a rear side. Thus, the color filter is disposed between a first substrate and a liquid crystal layer.


It has been held by the Courts that to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The cited reference of Shimada, individually or in combination with Hayase, fails to teach that the color filter is disposed between the first substrate and the liquid crystal layer, and that the protection layer is not a part of any of the plural thin film transistors. Accordingly, Applicant respectfully submits that the 35 U.S.C. §103(a) rejection of independent claim 26 is improper.

Since remaining dependent claims 42, 43, 45 and 46 recite additional unique elements and/or limitations, these claims remain patentable because the additional cited references do not supply the elements missing with respect to the independent claims.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejections of claims 26, 42-43 and 45-46, and respectfully requests allowance of claims 26, 42-43 and 45-46.

In view of the above, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorney would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,



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